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**United States Patent** [19]

Yamashita et al.

[11] **Patent Number:** **5,189,405**[45] **Date of Patent:** **Feb. 23, 1993**[54] **THIN FILM ELECTROLUMINESCENT PANEL**[75] **Inventors:** **Takuo Yamashita; Takashi Ogura; Hiroaki Nakaya; Masaru Yoshida**, all of Nara, Japan[73] **Assignee:** **Sharp Kabushiki Kaisha**, Osaka, Japan[21] **Appl. No.:** **811,905**[22] **Filed:** **Dec. 23, 1991****Related U.S. Application Data**

[63] Continuation of Ser. No. 470,154, Jan. 25, 1990, abandoned.

[30] **Foreign Application Priority Data**

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[51] **Int. Cl.<sup>5</sup>** ..... **G09G 3/30**[52] **U.S. Cl.** ..... **340/781; 313/509; 313/512**[58] **Field of Search** ..... 313/506, 509, 592; 428/690; 340/784, 781; 359/52, 62, 74, 75[56] **References Cited****U.S. PATENT DOCUMENTS**

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44-17303 7/1969 Japan .  
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61-290693 12/1986 Japan .*Primary Examiner*—Ulysses Weldon*Assistant Examiner*—Mathew Luu[57] **ABSTRACT**

A thin film electroluminescent panel includes a transparent substrate with an electroluminescent element formed on the substrate. There is a moisture proof sheet to cover the electroluminescent element. The moisture proof sheet includes a metal layer laminated between the two resin films. The periphery of the moisture proof sheet is adhered to the transparent substrate. There is a moisture proof sheet with a moisture absorbent powder thereon, located between the electroluminescent element and the moisture proof sheet. The combination prevents moisture from affecting the operation of the electroluminescent element and provides for stability.

**17 Claims, 2 Drawing Sheets**